

Title (en)  
Flux-cored wire.

Title (de)  
Flussmittelkerndraht.

Title (fr)  
Fil à âme de flux.

Publication  
**EP 0590623 A1 19940406 (EN)**

Application  
**EP 93115674 A 19930929**

Priority  
• JP 25908593 A 19930922  
• JP 28503492 A 19920930

Abstract (en)  
Disclosed is a flux cored wire for low alloy steels and high alloy steels which is excellent in arc stability and moisture absorption resistance of fume/slag. In this flux-cored wire, the flux components and the flux ratio are specified within the following ranges: namely, Na compound (Na<sub>2</sub>O equivalent amount) + K compound (K<sub>2</sub>O equivalent amount) (flux wt%): 1.5-6.0%; soluble Na compound (Na<sub>2</sub>O equivalent amount) (flux wt%): 1.5% or less; soluble K compound (K<sub>2</sub>O equivalent amount) (flux wt%): 0.8% or less; SiO<sub>2</sub> (flux wt%): 5-30%; TiO<sub>2</sub> + ZrO<sub>2</sub> + Al<sub>2</sub>O<sub>3</sub> (flux wt%): 5-40%; flux ratio (wire wt%): 10-30%. Further, the flux components satisfy the formula of { soluble Na compound (Na<sub>2</sub>O equivalent amount) + 0.1 x soluble K compound (K<sub>2</sub>O equivalent amount) } / { SiO<sub>2</sub> + 0.5 x (TiO<sub>2</sub> + ZrO<sub>2</sub> + Al<sub>2</sub>O<sub>3</sub>) } : 40 x 10<sup>-3</sup> or less. In addition, one or more kinds of a Li compound (Li<sub>2</sub>O equivalent amount) and a Cs compound (Cs<sub>2</sub>O equivalent amount) may be added in the total amount of 0.1-3.0wt% so as to satisfy the formula of {soluble Na compound (Na<sub>2</sub>O equivalent amount) + 0.1 x soluble K compound (K<sub>2</sub>O equivalent amount)-Li compound (Li<sub>2</sub>O equivalent amount)-Cs compound (Cs<sub>2</sub>O equivalent amount) } / { SiO<sub>2</sub> + 0.5 x (TiO<sub>2</sub> + ZrO<sub>2</sub> + Al<sub>2</sub>O<sub>3</sub>) } = 20 x 10<sup>-3</sup> or less. <IMAGE>

IPC 1-7  
**B23K 35/368**

IPC 8 full level  
**B23K 35/368** (2006.01); **B23K 35/30** (2006.01); **B23K 35/36** (2006.01)

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**B23K 35/368** (2013.01 - EP US); **B23K 35/308** (2013.01 - EP US); **B23K 35/3607** (2013.01 - EP US); **B23K 35/3608** (2013.01 - EP US); **B23K 35/361** (2013.01 - EP US)

Citation (search report)  
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• [A] PATENT ABSTRACTS OF JAPAN vol. 14, no. 552 (M - 1056) 7 December 1990 (1990-12-07)

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